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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/591,472	06/09/2000	Richard Robert Boland	Boland 8-2-15-2	2777

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EXAMINER

ESCALANTE, OVIDIO

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/591,472

Applicant(s)

BOLAND ET AL.

Examiner

Ovidio Escalante

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 8, 11-13, 17, 18, 21-23, 27, 28 and 31-42 is/are rejected.
- 7) ☒ Claim(s) 4-6, 9, 10, 14-16, 19, 20, 24-26, 29, 30 and 43 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Art Unit: 2645

DETAILED ACTION

1. This action is in response to applicant's amendment filed on February 11, 2004. **Claims 1-43** are now pending in the present application.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1,7,11,17,21,27 and 33-38 are rejected under 35 U.S.C. 102(e) as being anticipated by McHenry et al. US Patent 6,397,055.

Regarding claims 1,11 and 21, McHenry teaches a method, apparatus and system for message-based intelligent tandeming of an incoming call to an application node (landline facility) in telecommunication systems, (col. 6, lines 1-24), the method, apparatus and system comprising:

(a) receiving an incoming call leg directed to a called party directory number, (col. 9, lines 53-58; the switch (network interface) receives an incoming call from landline terminal 35 directed to called party 11);

(b) transmitting a first message to a database (SCP 39 & LIDB 41; col. 9, lines 1-12) to determine call treatment instructions, (col. 9, line 39-52,58-col. 10, line 5), (the processor in the switch sends a query (first message) to determine whether normal call processing or AIN processing should be initiated based upon profile information);

(c) receiving a second message containing a tandem parameter, (second message indicates to the switch whether AIN processing or normal processing is triggered; col. 9, line 58-col. 10, line 7);

Art Unit: 2645

(d) when the tandem parameter does not indicate tandeming (normal call processing), routing the incoming call leg to the called party directory number, (col. 9, lines 58-61; col. 11, lines 52-67);

(e) when the tandem parameter does indicate tandeming, (AIN processing for CPP calls), obtaining a routing parameter and performing digit analysis of the called party directory number, (col. 11, lines 52-62; col. 12, lines 1-23; routing parameters indicate to the processor which application node (i.e. landline facility) to route the caller to e.g. which landline facility and also to determine whether the called party is a subscriber to a CPP service based on digit analysis);

(f) when the digit analysis has been performed successfully, tandeming the incoming call leg to the application node (adjunct network entity), (col. 12, lines 24-51; when the called party number as been determined to be a subscriber to the CPP service, the incoming call is tandemed by the processor to the CPP landline facility node); and

(g) when the digit analysis has not been performed successfully, providing a default mode for the incoming call leg, (col. 11, lines 58-62), (if the called number did not match a stored number in the database, thus indicating a non-subscriber, a default mode i.e. routing to the called number is invoked, (step S5-fig. 2A).

Regarding claims 7,17,27, McHenry teaches wherein the tandem parameter has a first predetermined value to indicate that the incoming call leg is not to be tandemed to the application node, (normal call processing), and wherein the tandem parameter has a second predetermined value to indicate that the incoming call leg is to be tandemed to the application node, (AIN processing for CPP calls), (col. 9, lines 39-col. 10, line 5).

Art Unit: 2645

Regarding claim 33, McHenry teaches wherein the switching center is a mobile switching center, (MSC 15).

Regarding claim 34, McHenry teaches wherein the switching center is a wireline switching center, (end office 31; switch 51).

Regarding claim 35, McHenry teaches wherein the application node is a prepaid telecommunication service, (col. 15, lines 14-47).

Regarding claim 36, McHenry teaches wherein the application node is a calling party pays telecommunication service, (col. 10, lines 8-43).

Regarding claim 37, McHenry teaches wherein the application node is a one number telecommunication service, (col. 10, lines 8-25).

Regarding claim 38, McHenry teaches wherein the switching center transmits and receives a plurality of messages, to and from the database, via a second switching center, (col. 9, lines 27-52).

4. Claim 39 is rejected under 35 U.S.C. 102(e) as being anticipated by Buhrmann et al. US Patent 5,905,789.

Regarding claim 39, Buhrmann teaches a tandem parameter (call completion feature active parameter-step 708, fig. 7), the tandem parameter for use in a message transmitted from a database to a network switch (switching center), (col. 10, lines 56-66), the tandem parameter comprising:

a first predetermined value (not active), the first predetermined value designating that no tandeming is to be performed for an incoming call leg to the network switch, (col. 10, line 65-

Art Unit: 2645

col. 11, line 3; the calling party will not be tandemed to a node and will instead be connected to the called party); and

a second predetermined value (active), the second predetermined value designating that tandeming is to be performed for the incoming call leg to the network switch, (col. 10, lines 62-65; col. 11, lines 4-23; the calling party is connected to a node e.g. a voice mail adjunct).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 2,12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHenry in view of Applicant's admitted prior art:

Regarding claims 2,12 and 22, McHenry, as applied above, does not specifically teach wherein step (g) further comprises: transmitting a third message to the database, the third message indicating a tandeming failure. However, as noted by the applicants in page 2, lines 18-23, it was well known in the art to indicated that tandeming is unsuccessful and therefore, one

Art Unit: 2645

skilled in the art would have modified McHenry to provide a third message to the database so that the instructions can be provided to the switch to at least provide the default mode of reorder i.e. fast busy to indicate to the calling party to redial the number since the calling party failed to get connected to a destination.

8. Claims 3,8,13,23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHenry in view of Applicant's admitted prior art and further in view of Lewis US Patent 6,175,574.

Regarding claims 3,8,13,23 and 28, while McHenry, as applied above, teaches of indicating a tandeming failure and of indicating a tandem parameter, McHenry does not specifically teach of the a predetermined value in an ANSI-compatible redirection reason being indicated or wherein the tandem parameter is a predesignated value of a single-octet field or a plurality of octets within an ANSI-compatible calling features indicator parameter. However, the Examiner notes that it was well known in the art that signaling messages from the database to the network switch are arranged in the form of bits, i.e. octets that indicate to the switch information for processing the call. It would have been obvious if not inherent that McHenry would receive the tandem parameters as encoded octets so that the network switch can interpret the received message.

Nonetheless, Lewis teaches that it was well known in the art to indicate to a switch a value which is encoded in a single-octet field or a plurality of octets within an ANSI-compatible calling features indicator parameter, (col. 13, line 37-col. 14, line 30). Lewis teaches that the octets comprise of information regarding where to route the call, incoming party ID and called

Art Unit: 2645

party ID, (fig. 5; fig. 8). The encoding of Lewis is within an ANSI-compatible calling feature since Lewis uses SS7 messages.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the predetermined value of McHenry to include an ANSI compatible parameter arranged as octet fields as taught by Lewis so that the network switch can properly interpret the received message from the database for call routing instructions.

9. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHenry in view of Hentilä et al. US Patent 6,219,551.

Regarding claims 31 and 32, while McHenry teaches of using databases and integrating wireline and wireless network, McHenry does not specifically teach of wherein the database is a home location register or a visitor location register. However, it would have been obvious if not inherent that McHenry would have an HLR or VLR since McHenry uses a mobile switching center to contact a wireless subscriber at it was well known in the art that mobile switching centers use HLR's to retrieve wireless subscriber information, (col. 3, line 51-67; col. 4, lines 18-22).

Nonetheless, Hentilä teaches that it was well known in the art to have a mobile switching center which contacts a HLR/VLR database to locate a mobile subscribers profile, (col. 3, lines 51-col. 4, line 3). Hentilä also uses the HLR/VLR database for call routing information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of McHenry by including an HLR/VLR as taught by Hentilä so that the mobile switching centers can determine call routing information for a mobile subscriber.

Art Unit: 2645

10. Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buhrmann in view of Lewis.

Regarding claims 40-42, While Buhrmann teaches of receiving the tandem parameter via SS7 signaling, Buhrmann does not specifically teach of wherein the parameter is encoded as an octet.

However, the Examiner notes that it was well known in the art that signaling messages from the database to the network switch are arranged in the form of bits, i.e. octets that indicate to the switch information for processing the call. It would have been obvious if not inherent that Buhrmann would receive the tandem parameters as encoded octets so that the network switch can interpret the received message.

Nonetheless, Lewis teaches that it was well known in the art to receive signaling message and that the signaling messages are encoded as single or a plurality of octets, (col. 13, line 37- col.14, line 30). Lewis teaches that the octets comprise of information regarding where to route the call, incoming party ID and called party ID, (figs. 5; fig. 8). The encoding of Lewis is within an ANSI-compatible calling feature since Lewis uses SS7 messages.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the predetermined value of Buhrmann to include an ANSI compatible parameter arranged as octet fields as taught by Lewis so that the network switch can properly interpret the received message from the database for call routing instructions.

Allowable Subject Matter

11. Claims 4-6,9,10,14-16,19,20,24-26,29,30 and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments filed February 11, 2004 have been fully considered but they are not persuasive.

Applicant contends that McHenry does not disclose or suggest a tandem parameter and that the mere presence of an account record does not anticipate or suggest a tandem parameter. Applicant's support for this was reference to page 12, lines 1-16 of their application. The Examiner respectfully disagrees.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., pages 12, lines 1-16 of applicants specification) are not recited in the rejected independent claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Page 12, lines 1-16 discusses that the new tandem parameter is added to the variable length "calling features indicator" parameter used in ANSI-41 messages such as a registration notification return result message, a qualification request return result message and a qualification directive message. However, the independent claims recite the broad term "tandem parameter" and the examiner maintains that the broad term tandem parameter does not support these limitations in the current independent claims.

Art Unit: 2645

The Examiner believes that tandem parameter reads on the system of McHenry since e.g. the call processing of McHenry tandems the user between the first switch, CPP application node and the end switch. Tandem by definition, is where you have a series of network elements connected to each other. In this case the first network switch is tandemed to a CPP application node and in turn is connected to an end office switch. Therefore, the "tandem parameter" as broadly interpreted reads on the data records of McHenry since the data record indicates to the processor whether the incoming call should be send to an application node i.e. tandemed to the application node.

Applicant further contends that the tandem parameter of McHenry does not indicate tandeming routing the incoming call leg to the called party directly number. The Examiner respectfully disagrees.

As cited by the Examiner in the office action, McHenry teaches that normal call processing would be initiated. McHenry further teaches that this will happen when there is no indication that the called party is a CPP subscriber. This reads on a negative result of the tandem parameter, i.e. that the there should not be tandeming processing of the call. Therefore, the Examiner maintains that the call is routed to a called party when a tandem parameter does not indicate tandeming.

Applicant further contends that McHenry does not disclose or suggest obtaining a routing parameter and performing a digit analysis when a tandem parameter indicates tandeming. The Examiner respectfully disagrees. As stated above, the routing parameter and digit analysis allows the system to determine what node to route the caller to i.e. based upon the called number whether the caller should be routed to a CPP application node.

Applicant also contends for claim 37, that McHenry does not disclose or suggest a one number telecommunication service.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., an application node participates in the sequentially alerting of various telephone of the subscriber.) are not recited in the rejected claim 37. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant further contends that Buhrmann does not teach of tandem parameter The Examiner respectfully disagrees.

The broadly recited term tandem parameter does not require that the call leg be diverted by a switch to an application node and then being return to the switch for further processing. In response to the Examiner explanation, as provided above, since Buhrmann provides a user to tandemed between network elements based upon a subscriber profile then Buhrmann anticipates the use of tandeming.

Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., page 2, lines 8-11 of applications specification) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Art Unit: 2645

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

14. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

(703) 872-9314, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Art Unit: 2645

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ovidio Escalante whose telephone number is (703) 308-6262. The examiner can normally be reached on Monday to Friday from 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached on (703) 305-4895. The fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [fan.tsang@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ovidio Escalante
Examiner
Group 2645
March 12, 2004

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

